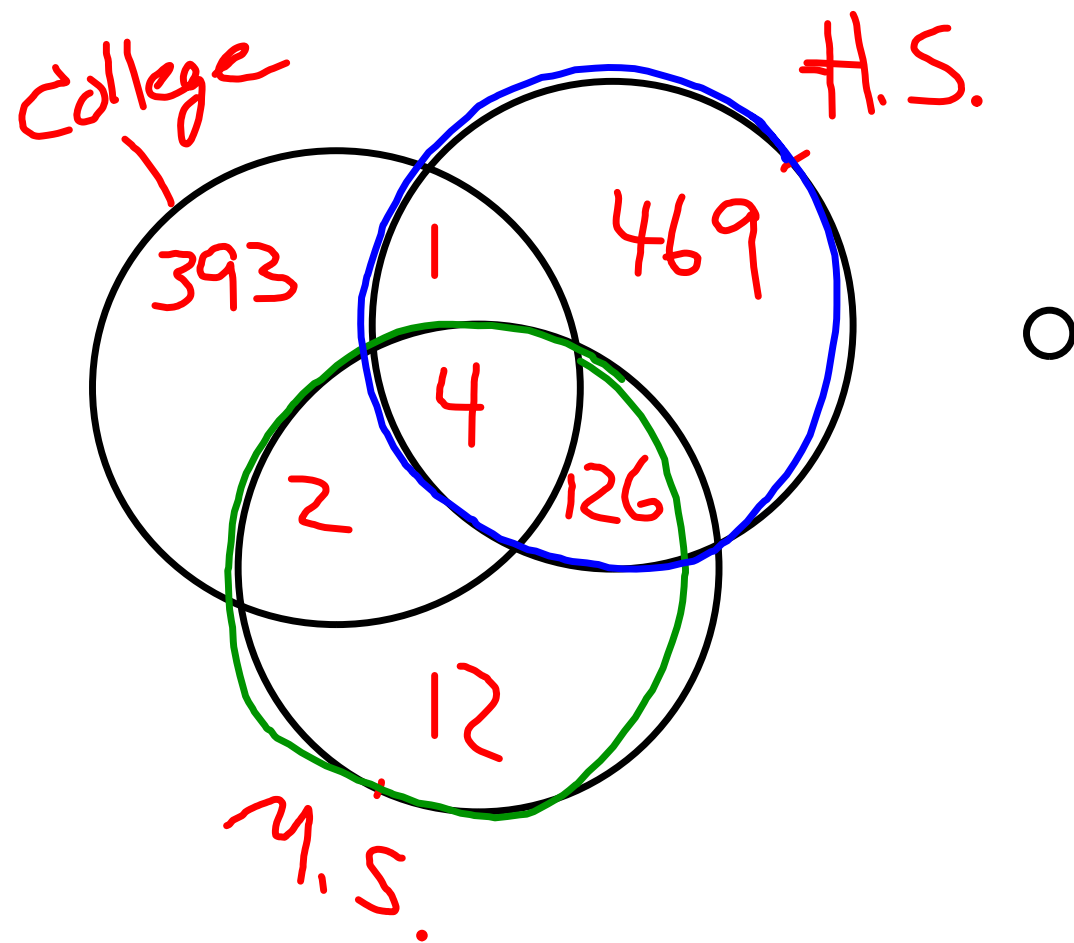


Pg. 5 48-49

$$-3xy = 45$$

$$\begin{array}{c} -3(-3)(-5) = \\ \vee \quad \quad \vee \\ + \quad \quad - \end{array}$$



Kristen sells major appliances. She is paid a monthly salary of \$1,600, plus a commission of 5% on the first \$2,000 of monthly sales and 10% on the rest of her monthly sales over \$2,000.

$$5\% \text{ of } \$2,000$$
$$.05 \cdot \$2,000$$

She gets
\$1,600
no matter what

What is Kristen's income for a month having sales of \$5,938.50?

$$\frac{5}{100} = \frac{X \rightarrow \text{commission}}{\$2,000}$$

5%
out of
100

$X = \$100$ commission for
the \$2,000 of sales

$$\begin{array}{r} \$5,938.50 \\ - 2,000.00 \\ \hline \$3,938.50 \end{array}$$

$$\frac{10}{100} = \frac{X \rightarrow \text{commission}}{\$3,938.50}$$
$$X = \$393.85$$

\$1600

\$100

+ \$393.85

monthly salary \$2093.85

Explain

I set up a proportion to find her commission of 5% on \$2,000.

It was \$100.

I subtracted \$2000.00 from her total monthly sales of \$5938.50.

to find the amount of sales over \$2,000. I then made another proportion

to find 10% of the amount over \$2,000 which is \$3938.50.

This amount is \$393.85. To find her monthly salary I added \$1600, \$100, and \$393.85 which is \$2093.85, her monthly salary.